

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
20 October 2005 (20.10.2005)

PCT

(10) International Publication Number
WO 2005/097233 A2

(51) International Patent Classification⁷: **A61M 5/00**

(21) International Application Number:
PCT/US2005/010206

(22) International Filing Date: 25 March 2005 (25.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/557,545 30 March 2004 (30.03.2004) US
60/638,027 21 December 2004 (21.12.2004) US

(71) Applicant (for all designated States except US): **ELI LILLY AND COMPANY** [US/US]; Lilly Corporate Center, Indianapolis, IN 46285 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **JACOBS, Alexander, Thomas** [US/US]; 764 Cambridge Street #7, Cambridge, MA 02141 (US). **JUDSON, Jared, Alden** [US/US]; 114 South Main Street, Topsfield, MA 01983 (US). **ROW, Gordon, Davidson** [US/US]; 47 Town Forest Road, Groton, MA 01450 (US).

(74) Agents: **PREIN, Edward, J.** et al.; P.O. Box 6288, Indianapolis, IN 46206-6288 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

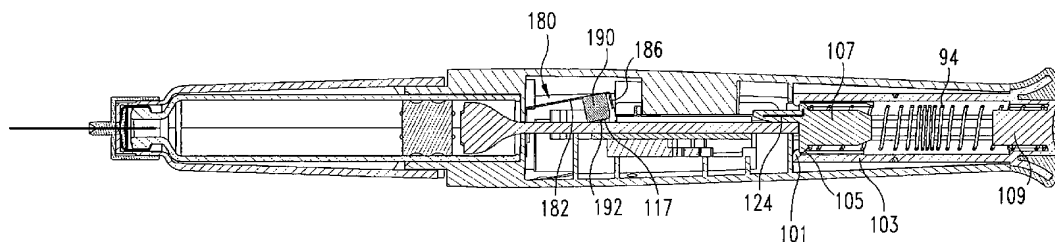
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designation US
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designation US

Published:

- without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MEDICATION DISPENSING APPARATUS WITH SPRING-DRIVEN LOCKING FEATURE ENABLED BY ADMINISTRATION OF FINAL DOSE



(57) Abstract: A medication dispensing apparatus with a spring-driven locking feature. The apparatus includes a drive member movable in a distal direction within a housing, and a fluid container with a movable piston that is advanceable by the drive member when such drive member is moved distally by a driving means. The apparatus includes a latching element having a skid that is slidable along a surface of the drive member as the drive member passes distally during advancement. The drive member is structured and arranged with the skid so as to maintain a latching lip of the latching element against a spring force in a first position free of the driving means during dose preparing and injecting prior to a final dose administration. The skid-engaging surface shifts distally of the skid such that the skid passes beyond a proximal end of that surface upon administration of a final dose, whereby the latching lip is urged by the spring force from the first position to a second position to physically lock the driving means to prevent further dose preparing and injecting.



WO 2005/097233 A2